

IN THE SPECIFICATION

Please replace numbered paragraphs 0016 and 0041 in the published application with the following amended paragraphs:

[0016] The present invention uses an MCG to create high frequency pulses of short duration. The physical device of the present invention comprises a helical MCG, which generates high voltage impulses due to the compressed magnetic flux inside the MCG. The helix of the MCG with its inner conducting tube has the function of an RF oscillatory circuit. A capacitor is connected via its leads between the final turn of the helix and an insulating end cap of the MCG. These leads function as a delay line which has the function of an RF oscillatory circuit. The vortex wake arising from the detonation and combustion processes assumes the function of a quarter-wave trap/antenna. If the MCG is in high velocity flight, a bow-shaped shock wave, followed by a second shock front will be established around the head of the MCG. These shock waves provide the primary antenna. When the MCG is stationary, the physical dimension of a coupling capacitor provided in the oscillatory circuit will produce the primary antenna. Alternatively, two MCG's can be joined head to head and ignited at the same time to produce the primary and quarter-wave trap antennas. The primary antenna and the quarter-wave trap antenna are capable of supplying spherical transverse electromagnetic (TEM) waves.

[0041] Delay line T₁ 54 represents the tube 30 and the part of the helix from point 44 to 58 of FIG. 2. At both high and low frequencies, this section is treated as a solid line due to the capacitance coupling between the turns of the helix, and is confirmed by the test results of FIGS. 7 and 8. Delay line T₂ 56 represents the loop between points 42 and 60, and comprises first and

second capacitor leads 201 and 202. The delay line(s) generate an RF pulse. The vortex wake 48 of FIG. 2 is the antenna/trap 62 in FIG. 3. The end 63 of the shielded impulse generator 76 is equivalent to point 44 in FIG. 2, while the end 65 of T_1 represents point 46 in FIG. 2.